



# Spring Valley Purchase

# Facts Figures Arguments

Prepared for the information of the Citizens of San Francisco under the direction of the Spring Valley Campaign Committee

JAMES ROLPH, JR., Mayor.

RALPH McLERAN, Supervisor,
Chairman Finance Committee.

M. M. O'SHAUGHNESSY,
City Engineer.

GEORGE LULL, City Attorney.

FEBRUARY 1, 1921.



# Spring Valley Purchase

# Facts Figures

Arguments

Prepared for the Information of the Citizens of San Francisco under the Direction of the Spring Valley Campaign Committee

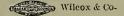
JAS. ROLPH, JR., Mayor.

RALPH McLERAN, Supervisor,
Chairman Finance Committee.

M. M. O'SHAUGHNESSY,
City Engineer.

GEO. LULL, City Attorney.

February 1, 1921



### CONTENTS

1.	Need for Comprehensive Statement	(
2.	San Francisco's Water Supply—Historical Summary	3
3.	The Present Water Situation	7
4.	Logical Plan of Future Development	8
5.	Spring Valley and Hetch Hetchy Interdependent	10
6.	Financial Considerations	11
7.	The Spring Valley Purchase and The Raker Act	17
8.	The Properties to Be Acquired	19
9.	The Purchase Price	23
10.	Advantage of Buying Now	25
11.	How the Properties Will Be Managed	28
12.	Arguments of Opponents Answered	28

## Spring Valley Purchase

FACTS :: FIGURES :: ARGUMENTS

### 1. Need for Comprehensive Statement:

The City of San Francisco is submitting to its voters the proposition of acquiring the properties of the Spring Valley Water Company for the sum of \$37,000,000, plus capital extensions and betterments, made and to be made by the company between March 1, 1920 and the date at which the purchase shall be completed, not exceeding \$1,000,000 in amount, and to authorize bonds bearing 5 per cent interest to cover the purchase price. In presenting to the people so complex a proposition as the question of acquiring by purchase nearly 62,000 acres of land with all the water rights and appurtenant water works structures, more than usual care must be taken that authentic facts and figures and well considered arguments are advanced. With this in mind the following facts and figures based on a careful study by competent men of authentic data. are presented, together with a brief summary of the arguments which have convinced all those who are intimately familiar with the situation that this purchase should be made and should be made now.

### 2. San Francisco's Water Supply—Historical Summary:

San Francisco has been supplied with water for municipal and domestic purposes by the Spring Valley Water Company or its predecessor in interest, the Spring Valley Water Works, ever since the year 1865. Prior to that date the city had been furnished with water from small springs and streams located within the city and county. It early became apparent that

no sufficient supply of water for the growing population could be obtained within the city limits. As early as 1858 and immediately after its incorporation, the Spring Valley Water Works commenced acquiring water rights and lands on the San Mateo The Pilarcitos reservoir was built in 1862; the peninsula. San Andreas reservoir in 1871: Lake Merced and upper Crystal Springs in 1877; the Crystal Springs concrete dam in 1888. The first supply from Alameda County, derived from the flow of Alameda Creek at Niles, was brought across the bay by submarine pipes in 1888, and a supplemental pipe line was built 12 years later, putting into use the Pleasanton supply, Calaveras Creek, and the Sunol filter beds. Since 1900 no new sources of water have been developed for the city, but the operations of the water company have been confined to a maximum utilization of the sources already developed. Construction work was commenced on the dam at the mouth of Calaveras Valley on the Alameda Creek in the year 1913, but due to the slow rate of construction adopted by the company and to the slide which occurred in the dam in the year 1918, this structure has not yet been completed, although it has progressed to a point where 8,000,000,000 gallons of water can be stored and conveyed into the Alameda Creek gravels during the dry months. In 1903 the city and the Spring Valley Water Company entered into a long series of controversies over the adequacy of water rates, which was not terminated until the decision by Judge Rudkin in 1918, holding that the rates fixed by the Board of Supervisors for the years 1906 to 1915 were unconstitutional, and that the impounded moneys should be returned to the company. In 1915 under amendment of the State Constitution, the Railroad Commission assumed jurisdiction of fixing rates, and pending a thorough investigation of the rates, permitted the company to charge rates yielding a revenue equivalent to that which was permitted under rates fixed by Ordinance of the Board of Supervisors in effect at the time the Railroad Commission took jurisdiction. These rates were fifteen per cent in excess

of those involved in the litigation decided by Judge Rudkin adversely to the city.

In the same year it became apparent that the city was soon to be faced with a shortage in water supply unless means were taken to either increase the supply or diminish the use. company determined upon the installation of nieters to check waste, and has prior to this date completely metered the city, materially reducing the water consumption. The growth of the city, however, has caused the normal consumption of water to increase steadily from time to time, so that by 1919 the company again found it desirable to take up the question of building additional pipe line facilities and completing the Alameda storage. Claiming that their existing revenue had become insufficient, due to the increase in cost of operation, to enable them to raise some \$12,000,000 additional required for the development program the company had adopted, a petition was presented to the Railroad Commission by the Spring Valley Water Company for an increase in rates. The city's representative filed objection to the increase, basing the objection on the grounds that no valuation had ever been established upon which rates could be intelligently determined by the Railroad Commission, and on the further grounds that the plan of development proposed by the Spring Valley Water Company would not harmonize with the Hetch Hetchy project, but would involve the construction of a parallel conduit which would be superfluous when brought in. It was evident that some plan of bringing additional water to San Francisco must be adopted in order to prevent a future shortage, a series of three dry years having placed the city's water supply in a more or less precarious position. The city administration determined at that time to again submit the question of purchasing the company's properties to the people, at a valuation to be fixed by the Railroad Commission, and filed with the Commission an offer to submit this question to the people again, providing the Spring Valley Water Company would agree to sell on a like valuation. The company responded with a similar resolution, offering to submit the question of sale to its stockholders at a valuation to be fixed by the Commission. Both parties requested the Commission to fix the valuation. There was forthwith filed with the Commission the entire transcript of the record in the cases tried in the Federal Court covering some 12,000 pages of testimony and 225 exhibits. In addition to this, supplemental testimony was presented by both the company and the city, and the Commission directed its own engineers to make an independent valuation. The city engineer submitted the list of properties which he considered essential that the city should acquire if the works were taken over.

On November 24, 1920, the Railroad Commission returned its decision, fixing the valuation for purchase at \$37,000,000 as of March 1, 1920. Thereupon, in accordance with the stipulation previously made, the Spring Valley Water Company submitted the proposition of sale to its stockholders, and was authorized by them to make an offer of sale based on the Railroad Commission's valuation, plus such capital expenditures as should be made between March 1, 1920, and the date at which the transfer might take place.

On the city's part, a charter amendment was prepared, authorizing the supervisors to purchase the properties described in the offer of the Spring Valley Company, which were identically the properties listed by the city engineer for valuation, and to issue bonds in an amount not exceeding \$38,000,000 in These bonds are to bear 5 per cent interpayment therefor. est and are to mature at the rate of \$1,000,000 a year, commencing in 1928. Inasmuch as the present bonding capacity of the city under the charter is insufficient to permit of the sale of such a large block of bonds, it is provided by the amendment that these bonds shall be exclusive of the present charter limit. An election was called by ordinance of the Board of Supervisors. submitting this amendment to the people at an election to be held March 8, 1920. Inasmuch as it authorizes the issuance of bonds, a two-thirds vote is necessary at such election for its adoption.

The reason that the bond issue is fixed in an amount not to exceed \$38,000,000, whereas the Railroad Commission valued the properties at \$37,000,000 is this:

The valuation of \$37,000,000 was fixed as of March 1st, 1920. Due to the fact that we have practically reached the limit of Spring Valley's present available supply, something must be done immediately to create an additional supply. (The present water situation will be discussed under the next heading.) In addition, normal extensions of the present system have to be made to accommodate new consumers. The work on the Calaveras dam is under progress by the Spring Valley Water Company and it is vitally necessary that the dam be completed at once to a point where it can be of service to the city. Such expenditures made by the company in the way of work on the Calaveras dam and new extensions are capital expenditures and it is, of course, necessary that such expenditures as may be made after March 1st, 1920, the date of the valuation, be returned to the company when the city takes over the properties. The amount of such expenditures, however, is limited to \$1,000,000, which it is estimated will be sufficient to carry on the necessary work on the Calaveras dam and make necessary additions and betterments to accommodate new consumers for a period of one year. All these expenditures are made subject to the approval of the city engineer and the amount thereof must be certified to by the Railroad Commission

### 3. The Present Water Situation:

The water consumption of every large city increases with the growth of its population and industry. San Francisco has not been an exception in this regard. Since 1910 consumption figures and reserve storage at the end of each year have been as follows:

Year.	Average daily consumption in millions of gallons.	Reserve storage, Dec. 31, in billions of gallons.
1910	35.605	21.369
1911	37.440	25.349
1912	39.125	17.397
1913	39.674	11.822
1914	39.4	14.660
1915	42.635	16.940
1916*	40.915	24.123
1917*	38.219	18.143
1918*	37.165	12.502
1910*	35.679	13.773
1920	36.163	11.158

<sup>\*</sup>Metering commenced in 1916 and was fully installed by 1919.

From the above table it will be seen that up to 1915 the consumption of water in the city steadily increased and the reserve storage at the end of each year was steadily decreased. Due to the installation of meters, a temporary halt was caused in the increase of consumption until the city was fully metered, and then the upward trend of consumption started again. A series of three dry years had reduced the reserve storage by the end of 1920 to almost a critical point. If 1921 had been a dry year instead of being a wet year, the city would have faced a water famine. When the Calaveras reservoir is completed the storage capacity of the company can be increased by 30,000,000,000 gallons, thus insuring the city against a water famine for several years to come.

### 4. Logical Plan of Future Development:

From engineering, financial, economic and legal standpoints, the logical sequence of developing additional water for San Francisco is as follows:

1. Immediate steps should be taken to construct a conduit between the Crystal Springs reservoir and Alameda Creek, of sufficient capacity to deliver the additional water which can be stored in the Calaveras reservoir, and for which no conduit facilities are available. This conduit can be designed so as to be available for carrying Hetch Hetchy water also, and can thus be built from the proceeds of Hetch Hetchy bonds already authorized.

- 2. Concurrently with the construction of this conduit, the Calaveras dam should be completed to such a height as will insure sufficient storage to keep the conduit filled. Much of this work on Calaveras has already been completed by the Spring Valley Water Company, and it is anticipated that sufficient surplus from earnings under municipal ownership will result to enable the completion of the same, at a cost of about \$1,000,000.
- 3. In the course of a few years additional conduit facilities between the peninsular lakes of the Spring Valley Water Company and the city distribution reservoirs in San Francisco should be constructed, including the new Amazon reservoir, for which the city has already acquired practically all the land. This conduit and reservoir can be built from the proceeds of Hetch Hetchy bonds, because they will be available for the transmission and storage of Hetch Hetchy water, although temporarily used in connection with the Spring Valley system.
- 4. Concurrently with the foregoing construction, the Mountain Division of the Hetch Hetchy Water Supply project should be completed and the enormous power output of over 60,000 horsepower to be derived from the Moccasin Creek power house generated and sold, thus taking the load of bond interest and redemption of approximately \$28,000,000 worth of Hetch Hetchy bonds off the shoulders of the taxpayers.
- 5. The acquisition of the rights of way for the main Hetch Hetchy water conduit and the engineering work preliminary to contracting for the construction of additional water tunnels and pipe lines can be carried on concurrently with the foregoing program. The actual construction of this water conduit between Moccasin Creek in the Sierras and Alameda Creek in the Coast Range where it will connect with the conduit to be built

immediately should be on such a program as will enable the delivery of water to San Francisco and vicinity at the moment when the water from the Calaveras sources has been fully absorbed in the local consumption. The exact date at which this latter work shall be completed will necessarily depend upon whether the East Bay cities join with San Francisco in the Hetch Hetchy project or not. The additional cost of this Hetch Hetchy conduit will depend upon the labor and material costs, at the date of construction, but under present estimates it should not exceed \$45,000,000.

6. As fast as the market for hydro-electric power permits, the city can proceed with additional development on the Hetch Hetchy project of nearly 200,000 horsepower at a relatively small increased cost, thus assuring a revenue which, together with the revenue from sales of Hetch Hetchy water will place San Francisco's entire water supply and power development on a better than self-operating basis. We need not build faster than we can use, but we should lay our plans for intelligent, business-like development of these great water and power resources.

### 5. Spring Valley and Hetch Hetchy Interdependent, Not Competitive Projects:

From the foregoing outline it can readily be seen that Spring Valley and Hetch Hetchy are not competitors. Each is necessary to the other. Engineering considerations demand that the city have available for the local storage of Hetch Hetchy water, reservoir sites advantageously located and of sufficient capacity. Crossing, as it must, several earthquake fault lines, the Hetch Hetchy aqueduct without local storage cannot be made an absolutely safe carrier of water to San Francisco. The Spring Valley Water Company controls all the desirable local storage sites, hence as an engineering proposition the practical operation of Hetch Hetchy is dependent upon the purchase of Spring Valley in order to insure near-by storage of at least 200 days' supply of water which City Engineer O'Shaughnessy considers the safety factor.

In order to sell Hetch Hetchy water we must have a distributing system. The Spring Valley Water Company owns all the distributing mains and tanks and pumping plants in the city. To duplicate this system for Hetch Hetchy water would eausc an enormous waste of public money and great discomfort to the public through torn up streets all through the city. Long and costly competition between the company and the city would result in great detriment to both. Eventually the city might win, but at an unwarranted cost. Condemnation of the distribution system alone of the Spring Valley Water Company would probably be little better on account of the large item of severance damage which surely would be allowed if this vital part of the company's works were separated from the rest. The amount of this severance damage cannot be exactly estimated but could easily equal the actual value of the distribution system. city of Los Angeles had this experience when it attempted to condemn the distribution system of the local electric power companies in that city. Every consideration of public convenience and economy indicates that Hetch Hetchy water should be delivered through the local storage and distribution system of the Spring Valley Water Company. Conversely, Spring Valley is dependent upon Hetch Hetchy. The reason why the Hetch Hetchy grant was given to San Francisco is that the water yield of the Spring Valley sources was shown to be insufficient for a long period in advance, and that the city must now provide for the future by securing these mountain rights before it should become too late. The city engineer estimates the ultimate economical additional development from Spring Valley sources to be acquired by the city at 25 million gallons daily. With this augmented supply there will be ample water for 700,000 people. When this is used up our mountain water must be here. We repeat that the Spring Valley and Hetch Hetchy are not competitive projects, but are interdependent.

### 6. Financial Considerations:

It is obvious that any development of additional water for San Francisco which can be paid for out of earnings at present

water rates is preferable to a development which must be paid for out of taxes. If the city purchases Spring Valley, it will be able from the revenues yielded by Spring Valley water works, under existing rates, to pay all the operating expenses of the system, to set aside an adequate depreciation fund, to pay the bond interest on \$38,000,000 worth of bonds at 5 per cent, to pay the bond interest at 5 per cent on the cost of an additional immediate development of the Calaveras water in accordance with the plan above outlined, and have available for bond redemption a sum varying from \$300,000 annually during the next few years up to \$775,000 annually by 1930. As the proposed bond issue does not start maturing until 1928 it means that the city can carry on the present system, making the required immediate development, pay all the bond interest, and redeem the bonds as they become due without calling upon the taxpavers for one cent for contribution, and without increasing water rates. More than that, a study of the revenues and operating expenses of the Spring Valley Company indicates that a surplus of \$2,500,000 can be accumulated in 10 years after meeting all of the foregoing expenditures. This is surely sufficient margin to allow for any reasonable error in making a 10-year forecast.

The foregoing statement also takes into account that the city will lose the taxes which Spring Valley now pays on lands situated within the City of San Francisco which are to be acquired by the city. This loss in taxes will be offset by the saving to the tax-payers in the charges which the city government now pays to the Spring Valley Water Company for water for municipal purposes, such as fire protection, street cleaning, sewer flushing, municipal buildings, etc. The figures upon which these conclusions are based are obtained from the company's books. Roughly speaking, it is estimated that during the past three years the city could have saved in the neighborhood of \$75,000 annually in operating costs, due principally to the saving in federal and state taxes, general officers' salaries, legal expense and publicity expense. As against these savings have been offset probable increases in the cost of labor under municipal owner-

ship, due to the higher schedule paid skilled labor by the city. In this connection, however, it should be remembered that a relatively small amount of skilled labor is employed on a water works. A large portion of the company's operating expenses arise from the cost of reading meters, keeping consumers accounts, making corrections and in the fuel oil necessary for operating its pumping stations. When the Hetch Hetchy project is completed and cheap electric power is brought to the city, considerable reduction in these pumping costs may be anticipated. This has not, however, been taken into account in the foregoing estimate. The attached table will indicate approximately how the city officials, who have made a study of the situation, believe municipal ownership of the Spring Valley system would work out.

# FORECAST OF REVENUES, EXPENSES, TAXES, RESERVES AND INTEREST CHARGES

1921	000,								
-	1922	1928	1924	1925	1926	1927	1928	1929	1930
908,000	4,018,000	4,138,000	4,258,000	4,383,000	4,508,000	4,638,000	4,778,000	4,913,000	5,058,000
137,000	1,170,000	1,206,000	1,242,000	1,280,000	1,317,000	1,356,000	1,398,000	1,438,000	1,482,000
187,000	200,000	212,000	225,000	237,000	250,000	262,000	275,000	287,000	300,000
300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
284,000	2,348,000	2,420,000	2,491,000	2,566,000	2,641,000	2,720,000	2,805,000	2,888,000	2,976,000
384,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000
200		200		•			•	200	
				-					4
				•					
75 000	150 000				300 000				300 000
000,6	000,000				200,000				
309,000	298,000	295,000	291,000	366,000				000'869	276,000
309.000	507,000	802,000	1.093.000	1.459.000	1.900.000	2,420,000	3 025 000	2.723.000	2.499.000
-	200,	0001	20040004	200,000	000,600,61	000101	000,600,60	200601	200,000
, d ou	284,000 384,000 384,000 309,000 309,000	54,000 2,348,000 00,000 1,900,000 1,5000 150,000 09,000 298,000 09,000 507,000	35,000     2,348,000     2,420,000       36,000     1,900,000     1,900,000       37,000     150,000     225,000       39,000     298,000     295,000       39,000     298,000     300,000	350,000         300,000         300,000         3,48,000         2,491,000           364,000         1,900,000         1,900,000         1,900,000           384,000         448,000         520,000         591,000           75,000         150,000         225,000         300,000           09,000         298,000         295,000         291,000           09,000         507,000         802,000         1,093,000	35,000         1,900,000         2,420,000         2,491,000         2,566,000           1,900,000         1,900,000         1,900,000         1,900,000           1,500         448,000         520,000         591,000         1,900,000           75,000         150,000         225,000         300,000         300,000           09,000         598,000         295,000         291,000         366,000           09,000         507,000         802,000         1,093,000         1,459,000	26,000         2,328,000         2,420,000         3,000,000         3	350,000         2,420,000         2,420,000         2,420,000         2,420,000         2,420,000         2,420,000         2,420,000         2,420,000         2,420,000         2,566,000         2,641,000         2,720,000           384,000         1,900,000         1,900,000         1,900,000         1,900,000         1,900,000         1,900,000           384,000         1,50,000         225,000         300,000         300,000         300,000           395,000         295,000         291,000         366,000         441,000         520,000           305,000         305,000         1,093,000         1,459,000         1,900,000         2,420,000	324,000         2,348,000         2,420,000         2,491,000         2,566,000         2,641,000         2,720,000         2,805,000           384,000         1,900,000         1,900,000         1,900,000         1,900,000         1,900,000         1,900,000         1,900,000           384,000         448,000         520,000         591,000         1,900,000         1,900,000         1,900,000         1,900,000           75,000         150,000         225,000         300,000         300,000         300,000         300,000           09,000         295,000         291,000         366,000         441,000         520,000         605,000           09,000         507,000         802,000         1,093,000         1,459,000         1,900,000         3,025,000	2,348,000       2,420,000       2,491,000       2,566,000       2,641,000       2,720,000       2,805,000       2,120,000         1,900,000       2,420,000

- 1 b yys statems at based on assumption of no sinking fund requirement for 7 years, redemption to be made in 1928 and thereafter at the rate of \$1,000,000 per year.

Figures taken from studies by Leavy and Sharon, and based on assumption stated in preceding pages.

The first item in the table covers the gross revenue estimated to be derived from each year's operation, using the average rate of increase indicated by the company's past experience. This may be easily exceeded if the city develops large quantities of additional water for sale to nearby cities.

"Operating expenses" are based on the average percentage which the operating expenses of the Spring Valley Water Company have borne to its revenues in the past. Due to the falling prices of materials, for which no allowance has been made, it seems probable that this estimate is very liberal.

"Taxes" refers to the taxes paid on lands outside the city and county. As stated, the city will lose the taxes on lands which it acquires in the City and County of San Francisco, but this loss will be compensated by not charging the tax-payers for water used for municipal purposes, the present revenue from which has not been included in the estimated gross revenue.

"Depreciation fund" is in excess of the average past requirements of the company for replacements, and will enable the city to keep the structures in first class operating condition.

Subtracting the sum of operating expenses, taxes and depreciation from the gross revenue, the net operating revenue is derived. From this must then be subtracted bond interest on the purchase price at 5 per cent. The resultant figure indicates a profit from operation that varies from \$384,000 in 1921 to \$1,076,000 in 1930. It is not necessary to stop there. Interest not previously estimated on the capital expenditures for additional water development may next be deducted. The cost of this development for the immediate future has been estimated by the city engineer at \$6,000,000, spread over a period of three or four years. Inasmuch as interest charges will mount progressively with expenditures, \$75,000 has been deducted for 1921, and the charge for each of the succeeding three years has been increased by \$75,000 a year until interest on the full \$6,000,-000 is reached in 1924. Subtracting these charges from the profit shown from operation, leaves available for bond redemption from \$309,000 in 1921 to \$776,000 in 1930. As no redemption will take place until 1928, this sum may be accumulated yearly, as shown in Item 10, leaving the city at all times a margin to cover possible errors in forecasting estimates, new capital expenditures, or if circumstances warrant, a reduction in water rates.

As against this business-like solution of the water problem, consider the result if the city does not acquire Spring Valley. Due to the difference of nearly 2 per cent in bond interest which the water company has to pay and to the more expensive plans of development which its officers have in mind for bringing additional water to San Francisco, the same study of Spring Valley operating statistics indicates that the present net revenue of the company will be insufficient to permit of this plan of additional development and the refunding of its outstanding bond obligations. The Spring Valley Water Company has outstanding a bond issue of \$20,000,000 which matures in 1923. This issue must be refunded on or before that date, or its bond holders will foreclose. In addition to this, it must raise \$12,000,-000 in new capital for additional development. If its money costs the company 2 per cent more than it does the city, it will mean that on this \$32,000,000 the company will have to pay \$640,000 annually more in interest charges than would the City of San Francisco. Its present revenues from existing water rates will not permit this to be done. The only solution for the company is apparently a raise in rates. That this will be the solution is intimated in the report of the Railroad Commission fixing the Spring Valley valuation, where it says:

"In view of existing conditions, it is not to be expected that the company is ready or able to raise the necessary new capital for construction and extensions, and the city cannot afford to wait for an improvement of the urgent present water situation until the completion of the Hetch Hetchy system.

"It has, for some time, been evident to this Commission that either the full responsibility of supplying water to the citizens of San Francisco must be assumed by this company or by the city. If the city is not to purchase the Spring Valley properties, then

it undoubtedly is the company's duty to go forward and make the necessary investment to furnish an adequate water supply to this community for its present and future needs. If it be determined that the city does not purpose supplying its citizens with water at this time, then this Commission properly will insist that the company take the full responsibility for this service and meet its obligation by the necessary capital expenditures coupled with adequate plans to operate for the future."

Thus, if San Francisco does not buy the Spring Valley now, it may reasonably expect to be faced with an increase in water rates, coupled with the burden of completing the Hetch Hetchy project at the taxpayer's expense without the aid of the net revenues which the city can derive from operating the Spring Valley properties. Nor, under competitive conditions, would a market for all the Hetch Hetchy water be assured and water rates would have to be very high to pay the interest on the Hetch Hetchy development. To any fair minded business man these considerations clearly indicate that the city should buy the properties now. If we wait until Spring Valley obtains a raise in rates and finances new development, we shall be in a much less advantageous position to talk of the purchase which must eventually be made, in any event.

### 7. The Spring Valley Purchase and the Raker Act:

In every Spring Valley purchase campaign the question has been raised by opponents as to what is the effect of the provisions of Section 9 (h) of the Act of Congress of December 19, 1913, commonly known as the Raker Act or Hetch Hetchy grant. This provision reads as follows:

"That the said grantee shall not divert beyond the limits of the San Joaquin Valley any more of the waters from the Tuolumne watershed than, together with the waters which it now has or may hereafter acquire, shall be necessary for its beneficial use for domestic and other municipal purposes."

Opponents of the Spring Valley purchase suggest that if San Francisco buys the Spring Valley properties, it will have to develop these properties before Hetch Hetchy water can be brought in, and that this acquisition will act as a legal impediment to the Hetch Hetchy project. Such, however, is not the case. In the hearings before Congress it was made plain by the representatives of San Francisco and by all the proponents of the Raker Bill that San Francisco intended to acquire and develop the Spring Valley properties. The irrigationists in the San Joaquin Valley, and many of the members of Congress, were insistent that there should be no waste of water. Freeman, in his report to the city, had suggested that Hetch Hetchy water could be brought over and temporarily used for irrigation purposes in the Santa Clara Valley. The San Joaquin Valley irrigationists vigorously insisted that water should not be taken from the Tuolumne watershed and used for irrigation purposes elsewhere. All conceded the superior rights of domestic users, but all were equally insistent that all the water available to San Francisco should be beneficially used for domestic and municipal purposes, and not wasted, or turned over to the Santa Clara Valley irrigationists. It therefore becomes rather apparent that what Congress meant by the foregoing provisions was that San Francisco should not bring in Hetch Hetchy water and waste the waters which it now has or is now using, or any waters which the city might hereafter acquire. This makes it necessary that San Francisco should not acquire water supply properties which it could not beneficially and economically develop. Great care has been taken by the city engineer to exclude from the proposed purchase any properties which it is not economically desirable to develop, such as the coast streams, the Ravenswood lands, Arroyo Valle lands and the Portola lands, all of which are owned by the Spring Valley Water Company, but none of which can, in the opinion of City Engineer O'Shaughnessy, be economically developed for municipal use.

If we acquire the Spring Valley properties, therefore, we shall not be obliged by the provisions of the Raker Act to develop any water for city use that we do not desire anyway. But

we will be required to develop and use those waters which we now have and will have acquired before making additional diversions from the Tuolumne. This is not an onerous obligation. It is common sense, economical procedure.

On the other hand, if San Francisco does not acquire the Spring Valley properties and the Spring Valley Water Company develops Calayeras or other sources and brings the water in to our population, the question may well arise as to whether the city can, by proceeding on competitive policy, force the company to waste any portion of the water that it has actually de-. livered to San Francisco and its inhabitants and substitute Tuolumne River water therefor, or turn it over to irrigationists. In other words, the debates and proceedings before Congress do not indicate that Congress was particularly concerned with the question of the title to the water. If San Francisco was using Spring Valley water, it should not be permitted to waste it and substitute Hetch Hetchy water therefor. Congress did not attempt to club the city into buying Spring Valley, although it had assurance from all of San Francisco's representatives that such was the city's intention, and a condemnation suit had actually been filed at the date when the Raker Act was passed. Opposition to the Hetch Hetchy grant from the Spring Valley Water Company had been withdrawn after an assurance from the city officials that its properties would be purchased by condemnation or otherwise. To that extent the good faith of the city is involved. But San Francisco's position under the Raker Act will be much stronger if it owns the properties sought to be acquired and hence can control their development than if it is forced to compete with the Spring Valley Water Company, and face the possibility that the company might develop other sources than those to be taken and bring the water in for municipal use and force the city to face the claims of the San Joaquin Valley irrigationists under the above provisions of the Act.

### 8. The Properties to Be Acquired:

As stated in the previous paragraph, the city engineer has designated, for acquisition, all of those properties which the city

needs, or will need, for the economical development of its water supply in conjunction with the Hetch Hetchy project, and no other properties. Briefly summarized, the properties listed for acquisition are the following:

To the City of County of

lowing:

In the City and County of	
San Francisco Acrea	ge
All of the reservoir sites, tank lots, pump stations, and the city distribution system, including water pipes, services and meters	5
Merced Lakes lying west of Twin Peaks, together with sufficient watershed lands adjoining to protect the purity of supply including 50 acres in San Mateo Co 829	9
In San Mateo County 3 great reservoirs at Pilarcitos, San Andreas, and Crystal Springs	0.1
All of the watersheds adjacent to said reservoirs, extending to the crest of the hills surrounding them19010	0.1
Miscellaneous lands containing pipes, pumping stations, wells, etc	
In Alameda and Santa Clara Counties	
2 reservoir sites, the Calaveras and San Antonio 259	2
The watersheds surrounding these reservoirs to the crest	
of the hills	4
The filter beds at Sunol and adjacent lands in Niles	
Canyon1306	3
Pleasanton well tracts and protective strips	9
Miscellaneous lands in all 4 counties 97	1
_	_
Total area to be acquired in fee6156	
Area of additional rights of way	0
The lands which have been excluded from purchase as bei	ng

either not needed or an uneconomical acquisition are the fol-

Acreage Watershed lands at Lake Merced not adjacent to the Covote Creek lands in Santa Clara Co..... 771. Pleasanton ranch lands 4731.8 Lands on slope toward Pacific Ocean. 2297.1 Lands near Portola and San Francisco Bay drainage...... 2844.2 Farming lands on Niles Cone 116.5 Grazing lands in Niles Canyon 1697.9 A few scattered lots in San Francisco, including the old Market Street reservoir tract through which streets have long ago been opened..... 20.2 Total area excluded lands 25876.7

These excluded lands are valued by the company at \$5,490,000.

All of the company's water rights except those relating to the so-called coast streams which drain into the Pacific Ocean. the company's rights near Ravenswood and storage rights at Arroyo Valle have been included. In addition thereto the city is to acquire the right to pump not exceeding 15,000,000 gallons daily of water as against the lands retained at Pleasanton by the Spring Valley Water Company. This right is in excess of any amount of water which has heretofore been pumped from that source. The company agrees not to interfere with this right except that it may take such water as is necessary for irrigating the retained lands, but nothing further. The city engineer has insured physical protection of the city's right to pump by including two strips of land running in the most advantageous direction through the lands retained by the company at Pleasanton, with the idea that the city can, if it desires, drive additional wells on said strips and extract all of the available water from beneath the adjacent lands.

The title to the foregoing properties is to be subject to the approval of the city attorney after report thereon by the title

company. The voters may rest assured that the city will not acquire or pay for any unsatisfactory titles if such are found. Previous examination of the company's titles prior to filing condemnation suit indicated that in general they are in very satisfactory condition.

The question is sometimes asked as to what lands have been excluded in the present purchase which were included in the purchase propositions of 1915 and 1910. The only lands which have been excluded from the present purchase which were included in the 1915 purchase, were the Arrovo Valle lands, portions of the Ravenswood lands and the Pacific Coast streams. The area of these exclusions was 7900 acres as against which 1200 acres of newly bought lands have been included, having greater value than the excluded lands. The reason for this exclusion was primarily that the city's legal advisers do not desire that any complications should possibly arise under the provisions of the Raker Act above cited, which might require the city to make any local water development which seemed uneconomical before bringing in the Hetch Hetchy water supply. As compared to the 1910 purchase, considerable land has been excluded, principally at Lake Merced. However, the Spring Valley Water Company has acquired so many large tracts of land since 1910 at Pleasanton and in the Calaveras Valley that it is difficult to make any accurate comparison with the acreage included in the 1910 purchase, nor does it seem particularly important to do so, as more than ten years have elapsed since that proposition was rejected, and values have materially changed.

In general, all of the lands which have been listed as excluded will be found to be those draining into watersheds from which the city will not take any water, or lands which are purely agricultural in character. In the former category may be mentioned the lands draining into the Pacific Ocean, lands draining into San Francisco Bay, the Arroyo Valle lands, and in the latter category may be mentioned the Pleasanton ranch lands, the marsh lands at Ravenswood and vicinity, farming lands on the Niles Cone and grazing lands in the Niles Canyon. All excluded lands in the City and County of San Francisco are those

which are not needed in connection with water supply purposes and are available for residential purposes.

### 9. Purchase Price:

The purchase price fixed in the company's offer and in the amendment submitted to the voters is \$37,000,000, plus such sums not exceeding \$1,000,000 in amount as the Railroad Commission shall certify to have been properly expended by the company for water supply purposes since March 1, 1920. This price is based upon the valuation made by the California State Railroad Commission as of the 1st day of March, 1920. Due to the impending water shortage during the last year, at the express request of the Mayor and the city engineer, the company proceeded to make additional expenditures on the Calaveras dam to increase its storage capacity and elsewhere so as to expedite the delivery of additional water to San Francisco if an emergency should arise. All of these expenditures are such as the city would have made had it owned the properties on that date, and they were made with the understanding that if the properties should be acquired they would be added to the valuation made as of March 1, 1920. At the present time the aggregate of these additional expenditures is in the neighborhood of \$400,000, and it is estimated that before the properties are finally taken over by the city they will approach \$1,000,000. It should be noted, however, that the city is protected by requiring the Railroad Commission's certificate as to the propriety of the expenditures before they can be added to the purchase price.

The valuation of \$37,000,000 was arrived at by the Railroad Commission after more than six months study of the evidence before it. This evidence, as stated in Section 2, consisted of the entire record of the appraisal made as of December 31, 1913, in the trial of the rate cases before the Master in Chancery, comprising testimony on the part of the company and on the part of the city, detailed valuations by real estate experts, hydraulic engineers, water rights valuations, arguments for and against the allowance of going concern value, and a study of the earnings and operating expenses of the company covering a period

of practically ten years. Further testimony was introduced showing the capital expendietures made by the company on its propcrties since that date, also changes in basic prices of lands and structures. It was agreed that the structures should not be valued on the basis of 1920 prices, which were abnormally high, but that an average for six years should be taken as the basis. In addition to all this testimony in behalf of the city and the company, the Commission caused an independent investigation and appraisal to be made by its own engineers. The details of these appraisals have, since the Commission's decision, been submitted to the city and show that the Commission's engineers valued the property at over \$500,000 in excess of the sum of \$37,000,000, which the Commission determined as a fair value. There is not the slightest evidence, therefore, for challenging the statement that the Commission arrived at its valuation after a careful, thorough and painstaking investigation, based upon months of study of the most voluminous and comprehensive record probably ever submitted to a judicial tribunal in a valuation case. If anything, the evidence before it was more favorable to the city than would have been the case if this had been a contested condemnation suit, for in such a suit, under the principles of law the valuation would have to be based on prices outstanding at the date at which it was made. This would certainly have justified a much higher figure for the valuation of structures than the Commission's price indicates. Furthermore, the figure of \$37,000,000 compares very favorably with the previous valuations. If the 1915 purchase price be taken, and adjustments made for capital expenditures, increased value of country real estate and increase in structural costs, and additional accrued depreciation since that date, the figure derived will be in excess of the Commission's valuation. If the valuation of \$34,-000,000 reached by District Judge Rudkin in the federal rate case be similarly compared, with due adjustments for changes in the properties valued, additional capital expenditures and accrued depreciation, a sum in excess of that which the Commission found will be reached.

As compared to the 1910 purchase price of \$35,000,000 for all the properties that the company owned, the Commission's valuation is probably not so favorable to the city. all fairness, it must be taken into account that during the ten years that have elapsed since 1910, there have been very substantial increases in real estate and structural values, and additional water rights have been developed, and the company's business and revenues have increased very largely. The gross revenue is about \$1,500,000 greater than in 1910. Under such circumstances, it is not to be expected that the same figure which was then submitted can be duplicated. It has already been set forth in paragraph 6 that the earnings from the company's properties will permit of a fair return to the city on the basis of the valuation reached, and are sufficient to remove any danger of the interest charges, operation costs or bond redemption falling upon the taxpavers or result in increased water rates.

Finally, it may be said that nothing in the present situation indicates that any valuation made at a future date would be less than the one we submit. The city has twice rejected the purchase, and each time an election is held the price is higher than the previous one. If the company is now permitted to retain its properties and expend over \$12,000,000 in new development and is given rates sufficient to yield a return, the probabilities are that the increase in its business and the normal increase in value of real estate and water rights will make any future price still higher in proportion than the one now submitted. The Spring Valley is not in the position of a utility which depends upon the life of a franchise for its ability to carry on its business. All of the Spring Valley franchises are of unlimited life, although none of them have been valued by any of the witnesses, nor has any attempt been made to capitalize this advantage.

### 10. Advantage of Buying Now:

Many of the advantages of immediate purchase become

apparent from a perusal of the foregoing facts. They may be enumerated briefly as follows:

- 1. Acquisition now of the Spring Valley properties will insure their coordination with Hetch Hetchy development. The city may make definite plans for its future program of construction with the knowledge that when Hetch Hetchy water is brought here there will be a local storage and distribution system ready to receive and market it.
- 2. With Spring Valley properties in San Francisco ownership, this city will be in a position to cordially invite the cooperation of the East Bay cities in our Hetch Hetchy project, thus reducing the expense to ourselves and assuring the economical development of our great Tuolumne resources for the benefit of all the bay cities. San Francisco will then be in a position, if it is thought desirable, to offer those of the East Bay cities who have been suffering from water shortage immediate relief from the Alameda Creek sources, provided they cooperate with us in the development of the Hetch Hetchy project.
- 3. If we purchase now, we practically insure ourselves against an increase in water rates which the Railroad Commission rather intimates in its report will necessarily have to be made if the water company retains possession and continues development on its own program. In this connection the Commission says:

"It has, for some time, been evident to this Commission that either the full responsibility of supplying water to the citizens of San Francisco must be assumed by this company or by the city. If the city is not to purchase the Spring Valley properties, then it undoubtedly is the company's duty to go forward and make the necessary investment to furnish an adequate water supply to this community for its present and future needs. If it be determined that the city does not purpose supplying its citizens with water at this time, then this Commission properly will insist that the company take the full responsibility for this service

and meet its obligation by the necessary capital expenditures coupled with adequate plans to operate for the future.

"It will not do to say that this program of development may be entered upon by the company and that the city, nevertheless, may purchase at any time it sees fit, because it must be remembered that whatever investment is made by the company must be compensated for later by the city. In addition, the development undertaken by the company will probably go forward in conflict with the plans which the city might adopt if it entered into this service.

"We believe that from every standpoint a deliberate choice should now be made by the citizens of San Francisco, either for the continuance of water supply by the privately owned company with the full responsibility placed upon that company for such development as will safeguard the water needs of this community for the future (with which, of course, must go reasonable assurance that the investment made by the company for this purpose will not be destroyed). or that the city will promptly enter into possession and ownership of its own water supply and thereafter occupy the field completely. We consider a continuation of the present condition as a danger to the community as far as its water supply is concerned and we urge that a definite decision be reached at the earliest possible date on this important matter."

4. The acquisition of this great municipal empire of 62,000 acres—practically twice the present area of the City of San Francisco—will furnish to our citizens a source of justifiable pride and enjoyment, without in any way endangering the purity of the water. Highways and boulevards can, as time progresses, be built through these properties, and, with proper sanitary regulations, at selected places picnic grounds can be provided, and new additions to the city's park and playground system, of almost unlimited extent and varied scenic

character, can be obtained. No more beautiful spots in California can be found than in some of the corners of the San Mateo peninsular lands of the Spring Valley Water Company, now excluded from public enjoyment. Wilder and more rugged scenery may be found in the Calaveras and Upper Alameda canyons, while nearby parks and playgrounds are possible in the vicinity of the Merced Lakes.

All of the foregoing considerations and many others lead to the conclusion that these properties should be acquired by San Francisco, and should be acquired now.

### 11. Management of Properties:

In order that the properties to be acquired may be operated and managed by a body whose sole duties and responsibilities shall be the operation and management thereof the charter amendment, authorizing their purchase, provides that the Board of Supervisors shall create by ordinance a Water Commission and fix its powers, duties and responsibilities, said commission to be appointed by the Mayor. It is obvious that some commission should be charged with this responsibility and that there is sufficient work to keep such a commission employed.

### 12. Arguments of and Opponents' Answer:

While it is difficult to concede that any public-spirited and well-informed citizen of this city will oppose this purchase, past experience indicates that opposition may be expected. It may be of interest to briefly summarize and answer some of these arguments.

1. One of the first arguments always made has already been answered, namely, that if Spring Valley is purchased, San Francisco cannot develop Hetch Hetchy water because of the provisions of the Raker Act hereinbefore mentioned. This is always coupled with the curious claim that the Spring Valley Water Company has sufficient water for all time. If such were the case, the city would never have gone to Tuolumne County for its future supply. As heretofore pointed out, we are taking only such sources as it is economically desirable to

develop. There is nothing in the Raker Act or any other law which prevents us from fully utilizing our Hetch Hetchy sources as soon as this local water is used up, the period of time which may be conservatively estimated at from ten to twenty-five years, depending upon whether the East Bay cities join with us or not.

- 2. The argument is made that the Spring Valley title to the Calaveras waters is bad. This is based on a long-standing controversy between the Spring Valley Water Company and certain irrigationists on the Niles Cone in Alameda County. Since the last purchase proposition, by stipulation this controversy was submitted to a Board of Arbiters, consisting of the Water Commission of the State of California, and has been decided practically in accordance with the company's contentions. San Francisco will succeed to the company's rights in this matter.
- 3. It is contended that the price is unreasonable. Every prominent engineer who has examined the properties of the company, including Waldo Smith, engineer for the great New York Ashokan aqueduct, has pronounced the price to be reasonable, and in line with previous purchase valuations when recent capital expenditures by the company are taken into account.
- 4. It is claimed by opponents that the water rates will have to be raised under municipal ownership. A careful analysis of the Spring Valley revenue and operating figures heretofore made absolutely negatives any such conclusions. The figures used by the opponents in this respect are usually pulled out of thin air or based on hypothetical increases in cost which will never occur. The figures hereinabove submitted are based on actual operating experience, and are as reliable as can be made.
- 5. Another argument made in previous campaigns is that this issue would cause us to exceed our bond limit. As these water bonds have by the terms of the proposed charter amendment been expressly placed outside of the bond limit, for the

reason that the properties which the city will acquire will be self-supporting, this argument is conclusively answered.

- 6. It is stated that the Spring Valley pipes and distribution system are rotten and inadequate. This statement is absolutely without any sound foundation. In the trial of these various contested suits, with the hope that the city might be able to show a higher degree of depreciation and thus reduce the valuation, the city's engineers caused sections of the pipes to be cut throughout various portions of the city and subjected to examination and tests. In practically every case the pipe was found to be in as good condition as when laid, due to the superior coating which it had been given under the direction of Engineer Herman Schussler, who originally built the works. Some of the company's pumping stations are not of the latest type, but they have all been working practically without cessation since the date of their installation, and are apparently in as good working order as before. Furthermore, their present condition has been fully taken into account by the various engineers who testified as to their value. While the Commission does not indicate its ruling on the percentage condition of structures, the evidence shows that all valuations submitted to it by the city's engineers and its own engineers fixed the percentage of condition at less than 80 per cent. It is to be presumed that such depreciation as has actually accrued has been taken into account in fixing the price. The company has at all times maintained an adequate depreciation fund from which ordinary replacements were made as time progressed, and if any faulty pipe sections were ever found, they were immediately taken out and replaced with new pipe, thus keeping the system in first-class operating condition.
- 7. Purity of Water: Equally lacking in force are the statements sometimes made that Spring Valley water is impure. Analyses made by the city's engineers from time to time indicate that Spring Valley water is first class in every respect from a potable standpoint. It is true that it is not as soft as the mountain water, and for that reason probably is less desir-

able for washing clothes, etc. The percentage of hardness, however, is not excessive, and when eventually mixed with the Tuolumne water it should be substantially reduced.

- 8. Claim is made by certain opponents that the Spring Valley has not a clear title to some of its lands. This is answered by the provision in the proposed amendment that the company must furnish a title satisfactory to the city's legal advisor, the city attorney, after he has caused a search of the same to be made by duly licensed title companies. The city attorney is under bonds to the city for the faithful performance of his duty. It is to be presumed that he will not approve and that the city will not accept or pay for any land to which a satisfactory title is not shown. It does not follow that because a claim is asserted it is necessarily a valid one or that every negotiation should be halted while the claim is being adjudicated.
- It has been urged that the city ought not to agree upon any purchase price without bringing condemnation proceedings to obtain the properties. This argument does not apply to the present situation where the purchase price has not been agreed upon, but has been fixed by the Railroad Commission upon the basis of conflicting evidence. Furthermore, the Railroad Commission is the body legally constituted under California law to make findings of value in all condemnation suits for the taking of public utilities. If the city should now reject this purchase and file formal condemnation proceedings in the Railroad Commission, can any reasonable person doubt that the valuation found by the Commission would be substantially the same as that which it has fixed in this case? It might even be greater, for as has been stated, the rules of law would require the valuation to be based entirely upon the present day price. whereas in the present case, a six-year average has been taken.

For the information of those who desire to carefully study this important proposition which is on the eve of submission to the people of San Francisco, the foregoing facts and figures, compiled after careful study and impartial consideration, are submitted. The election date is March 8th, 1921. We ask every citizen to do his or her duty by voting "Yes."

JAMES ROLPH, JR.,

Mayor,

Ralph McLeran,
Chairman Spring Valley Campaign
Committee,

M. M. O'SHAUGHNESSY, City Engineer,

GEORGE LULL,

City Attorney,

ROBERT M. SEARLS,
Special Counsel Hetch Hetchy
Water Supply.

Dated: February 1, 1921.



